

Title (en)

BICUSPID VALVE PROSTHESIS, TRICUSPID VALVE PROSTHESIS, AND STENT THEREFOR

Title (de)

BIKUSPIDALKLAPPENPROTHESE, TRIKUSPIDALKLAPPENPROTHESE UND STENT DAFÜR

Title (fr)

PROTHÈSE DE VALVE BICUSPIDE, PROTHÈSE DE VALVE TRICUSPIDE ET ENDOPROTHÈSE ASSOCIÉE

Publication

EP 3636223 A4 20200506 (EN)

Application

EP 18812866 A 20180607

Priority

- CN 201710434531 A 20170609
- CN 2018090191 W 20180607

Abstract (en)

[origin: EP3636223A1] A mitral valve prosthesis (10), a tricuspid valve prosthesis and a stent (100) thereof. The stent (100) is configured to support the heart valves of the mitral valve prosthesis and has a contracted configuration for delivery and an expanded configuration for deployment. The stent (100) comprises, along its axial direction, an inflow section (110), a transition section (120) and an outflow section (130), and the transition section (120) is connected to the inflow section (110) at one end and to the outflow section (130) at the other end. When in the expanded configuration, the inflow section (110) is located upstream of the outflow section (130) with respect to the blood flow direction. The inflow section (110) is less radially rigid than the outflow section (130) and/or the transition section (120). Due to such a small radial rigidity, the inflow section (110) can well adapt itself to the anatomy of the native mitral annulus. As a result, its pressure and interference on the aortic valve can be reduced, resulting in a significant decrease in the risk of leading to occlusion of the left ventricular outflow section. Additionally, during the release, the inflow section (110) can adapt itself to changes in the diameter of the stent (100) and thereby buffer radial deformation and axial displacement of the stent (100) during its expansion, thus enhancing the release reliability.

IPC 8 full level

A61F 2/24 (2006.01)

CPC (source: CN EP KR US)

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Citation (search report)

- [X] WO 2015179473 A1 20151126 - ST JUDE MEDICAL CARDIOLOGY DIV [US]
- [X] WO 2013103612 A1 20130711 - TENDYNE HOLDINGS INC [US], et al
- See also references of WO 2018223996A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3636223 A1 20200415; EP 3636223 A4 20200506; EP 3636223 B1 20230222; CN 109009568 A 20181218; CN 109009568 B 20231031; JP 2020522358 A 20200730; JP 6987890 B2 20220105; KR 102342242 B1 20211223; KR 20200015592 A 20200212; US 11185410 B2 20211130; US 2020138572 A1 20200507; WO 2018223996 A1 20181213

DOCDB simple family (application)

EP 18812866 A 20180607; CN 201710434531 A 20170609; CN 2018090191 W 20180607; JP 2019567717 A 20180607; KR 20197038346 A 20180607; US 201816619626 A 20180607